

## SITE INFORMATION

Revised 4/30/98

Current Site Name: Kashima  
Location: Kashima, Japan  
Site Number: 138  
Geographic Region: Pacific  
Tectonic Plate: Eurasian

General Site Description: The station is located at the Kashima space research center operated by Communications Research Laboratories (CRL), Ministry of Posts and Telecommunications. CRL has developed original VLBI observation system called K-3 and K-4 which is compatible with the Mark III system. The 26-meter antenna was built in 1968 and has been used in joint VLBI experiments between Japan and the U.S. since the summer of 1984. Possession of the antenna will be moved to GSI in 1992. The 34-meter antenna was built in 1988 as the main station of the western pacific VLBI network and is equipped with 10 frequency band receivers from 330 mhz to 43 ghz. This antenna is being used for Geodetic VLBI and astronomical observations.

Geological Province: Middle to Upper Pleistocene Volcanic Tephra.

Local Geology: Originally volcanic ash, scoria, etc. Most of them weathered to form so-called Kanto Loam. Volcanic ejecta were provided by Pleistocene/active volcanoes such as Fuji, Halone, and others. However, at present, no active volcanism is within 100 kilometers of Kashima.

Site Topo Map: n1-54-19-5-1 (gsi)

Comments: Further geological description available in Machida, h., Geogr. Rept. Tokyo Metropol. Univ., 11, 109-132.

## CONTACT INFORMATION

Site Ownership: JAPAN  
Site Management: Communications Research Laboratory (CRL)

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# MONUMENT INFORMATION

Revised 4/30/98

Current Site Name: Kashima  
Location: Kashima, Japan  
Site Number: 138  
Number of Observing Monuments: 2  
Surveyed into National Network? Yes

Monument Number: 1856  
Type of Monument: Intersection of Rotation of Axis of Antenna  
Monument Inscription: None  
Systems using Monument: 26-Meter Antenna

Latitude: N 35° 57' 14.80371"  
Longitude: E 140° 39' 45.84997"  
Elevation: 45.02 meters  
Height above Ellipsoid: 80.122 meters  
Geodetic Coordinate Source/Date: Geographical Survey Institute Ltd. / 18-Mar-92  
Geodetic Coordinate Datum/Ellipsoid: IERS ITRF94 (1993)  
Elevation Datum: Unknown  
Source of Monument Geodetic Survey Ties:  
Comments: AZ-EL intersection measured by corner cube attached to main antenna reflector; ground marks connected to NATNET by GPS.

## Differential Coordinates

Monument Number	Monument Inscription	X	Y	Z
1857	NONE/34-M ANT AT KASHIMA	243.025	109.489	160.599

  

Monument Number	Monument Inscription	North	East	Up
1857	NONE/34-M ANT AT KASHIMA	199.621	-238.725	-1.701

# MONUMENT INFORMATION

Revised 1/8/98

Current Site Name: Kashima  
Location: Kashima, Japan  
Site Number: 138

Monument Number: 1857  
Type of Monument: Intersection of Rotation Axis of Antenna  
Monument Inscription: None  
Systems using Monument: 34-Meter Antenna (Kashim34)

Latitude: N 35° 57' 21.28010"  
Longitude: E 140° 39' 36.32341"  
Elevation: 43.09 meters  
Height above Ellipsoid: 78.411 meters  
Geodetic Coordinate Source/Date: Geographical Survey Institute / 18-Mar-92  
Geodetic Coordinate Datum/Ellipsoid: IERS ITRF94 (1993)  
Elevation Datum: Unknown  
Source of Monument Geodetic Survey Ties:  
Comments: The position of the AZ-EL intersection was measured by a corner cube attached to the main reflector of the antenna

## Differential Coordinates

Monument Number	Monument Inscription	X	Y	Z
1856	NONE/26-M ANT AT KASHIMA	-243.025	-109.489	-160.599

Monument Number	Monument Inscription	North	East	Up
1856	NONE/26-M ANT AT KASHIMA	-199.621	238.725	1.701

# SITE SKETCH

Revised 4/30/98

Current Site Name: Kashima  
Location: Kashima, Japan  
Site Number: 138

# OCCUPATION HISTORY

Revised 1/8/98

Current Site Name: Kashima  
Location: Kashima, Japan  
Site Number: 138

## SLR Occupations

Monument Number	Occupying System	Occupation Designator	Starting Date	Ending Date
7335	KEYSTONE	73357201	01-Mar-96	-----

## VLBI Occupations

Monument Number	Occupying System	Occupation Designator	Starting Date	Ending Date
1856	26-Meter	18567601	01-Jan-84	-----
1857	34-Meter	18575801	19-Apr-90	-----
7334	10-Meter	73342601	01-Mar-96	-----

## GPS Occupations

Monument Name	Starting Date	Ending Date
No Previous Occupations		

## Footprint Surveys

Survey	Starting Date	Source
No footprint surveys were completed. See the station description notes for geodetic ties to other local geodetic stations.		